Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for inducing a humoral or cellular immune reaction to a human prostatic acid phosphatase (PAP) in a human subject in need thereof, comprising

administering intradermally, intramuscularly, intravascularly, intravenously, or intraarterially to the human subject an effective amount of a recombinant DNA construct comprising (i) a backbone of pNGVL3, (ii) a polynucleotide sequence encoding human PAP inserted into the backbone of said pNGVL3 and operably linked to a promoter, and (iii) an immune stimulatory sequence (ISS) ~~ISS~~ motif inserted into the backbone of said pNGVL3,

whereby the human subject develops a humoral or cellular immune reaction against human PAP.

2. (previously presented) The method of claim 1, wherein the human subject has prostate cancer and an antitumor immune response to prostate tumors is elicited in the human subject.

3-6. (canceled)

7. (previously presented) The method according to claim 1, wherein destructive prostatitis is induced in the human subject.

8. (original) The method according to claim 1 wherein cellular immune reaction against cells expressing PAP is induced.

9. (original) The method according to claim 8, wherein both humoral and cellular immune reactions against PAP are induced.

10-22. (canceled)

23. (currently amended) A DNA vaccine suitable for intradermal, intravascular, intramuscular, intravenous, or intraarterial administration to a human subject, the vaccine comprising a plasmid vector that comprises (i) a backbone of pNGVL3, (ii) a polynucleotide sequence encoding human prostatic acid phosphatase (PAP) inserted into the backbone of said pNGVL3 and operably linked to a promoter, and (iii) an immune stimulatory sequence (ISS) ~~ISS~~ motif inserted into the backbone of said pNGVL3, wherein upon administration of said vaccine to a human subject a cytotoxic immune reaction against cells expressing PAP is induced.

24-27. (canceled)

28. (original) The DNA vaccine according to claim 23, wherein the plasmid vector does not express in eukaryotic cells any gene other than the polynucleotide sequence encoding PAP.

29. (original) The DNA vaccine according to claim 23, wherein the plasmid vector is pTVG4.

30. (original) A pharmaceutical composition comprising the DNA vaccine of claim 23, and a pharmaceutically acceptable carrier.

31. (previously presented) A pharmaceutical composition of claim 30, further comprising a suitable amount of GM-CSF.

32. (canceled)